

AMENDMENTS TO THE SPECIFICATION

Kindly amend the specification at the paragraphs indicated below:

[0039] An example of such an image ~~recorded~~ recorded with an analyzing fluid based on NaCl solution is shown in Figure 2A. In these images, the particle size is illustrated along the x-axis, the number of particles is illustrated along the y-axis. As shown in Fig. 2A, only particles up to a given maximum particle size are present, and fewer particles exist at the larger particle sizes. An analogous detection result will be obtained for the filtered antibody fluid essentially only containing particles of a given particle size (not shown).

[0040] Following a simultaneous, separate injection of the analyzing fluid and antibody fluid, a reaction occurs in the measuring cell yielding ~~microprecipitations~~ microprecipitations, and a detection of the size and number of antigen-antibody precipitates is carried out.

[0044] In addition, the concentrations of the antigen or antibody solutions used should not be so low that an antigen-antibody reaction that occurs will not produce too many precipitates, or precipitates that are too large, since otherwise, several particles may be present at once in the beam, and a transit time would be very difficult to detect. The

highest sensitivity of the method according to the invention is in the femtomolar and attomolar range.

[0053] The method according to the invention is suitable for a variety of applications in the ~~areas~~ areas of water analysis (detection of constituents and harmful substances), food technology (detection of microorganisms, constituents), in biological or medical tests (e. g., the detection of certain DNA or RNA sequences, certain bacteria or allergens (allergy tests)). Applications are possible as well in the areas of hydrophilic macromolecular multispacers, branch DNA sensors or quantitative PCR. The method according to the invention can also be used, more particularly, for the detection of the infectious prion protein PrP^{Sc} in BSE tests. Since in the method according to the invention extremely small quantities of this prion protein can be detected, the method according to the invention is also suitable for a detection of the infectious prion protein PrP^{Sc} in blood.

[0071] A detection device according to the invention more particularly allows particles between 20 nm and 5 µm to be determined.